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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,027	12/30/2003	Setsuhiro Saheki	1018.1200101	6516
28075	7590	07/27/2004	EXAMINER	
CROMPTON, SEAGER & TUFTE, LLC 1221 NICOLLET AVENUE SUITE 800 MINNEAPOLIS, MN 55403-2420			BELLINGER, JASON R	
			ART UNIT	PAPER NUMBER
			3617	

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/748,027

Applicant(s)

SAHEKI, SETSUHIRO

Examiner

Jason R Bellinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/30/03 & 6/14/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, and 7-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Reinhardt in view of Johanson et al. Reinhardt shows a tire valve 10 having a nut 38 and a valve stem 12. The nut 38 is to mount the valve stem 12 to a wheel Q in a valve hole thereof. A grommet 42 is attached to the valve stem 12 to contact a wall of the valve hole to seal a tire when the valve stem 12 is mounted to the wheel Q. The grommet 42 elastically deforms into the valve hole between the valve stem 12 and the wall of the valve hole.

Reinhardt does not show the valve nut including a shoulder housing an elastic body on an inner wall of the nut. Johanson et al teaches the use of a nut 4 having a shoulder 7 formed along an inner wall at a lower end of the nut 4. An elastic body 8 is arranged in the shoulder. The elastic body 8 is ring-like in shape and has an outer diameter that is greater than an inner diameter of the shoulder 7. The nut 4 includes a threaded portion that is separated from the shoulder 7. As shown in Figure 4, the nut 4 and elastic body 8 come into contact with a first object 2 when mounting a second object 14 to the first object.

Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the sealing nut taught by Johanson et al

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in place of the nut 38 and washer 40 of Reinhardt as a substitution of equivalent fastening means, and to further seal the tire valve of Reinhardt. The nut and elastic member of Johanson et al would then contact the wheel of Reinhardt when securing the tire valve to the wheel.

While Reinhardt as modified by Johanson et al does not show the elastic member elastically deforming into the valve hole between the valve stem and a wall of the valve hole, it would be obvious that the elastic member would do so given the fact that it has a diameter greater than that of the shoulder, and thus extends beyond the lower end of the nut (see Figure 2 of Johanson et al). Therefore, when the nut is tightened down against the wheel, the elastic member would deform and engage between the valve stem and wall of the valve hole.

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reinhardt in view of Johanson et al as applied to claims 1-5, and 7-10 above, and further in view of Martin. Reinhardt as modified by Johanson et al does not show a transmitter attached to the tire valve.

As shown in figure 1, Martin teaches the use of a transmitter 12 with a tire valve 16 to measure the condition of the tire, generating and transmitting that data to the vehicle user. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the tire valve of Reinhardt as modified by Johanson et al with a transmitter for the purpose of monitoring the air

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pressure inside the tire during operation, thus allowing the user to increase or decrease the air pressure of the tire when needed.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered to show tire valves including sealing means associated with the securing nuts used to mount the tire valve to a wheel. For example, Boyer shows a tire valve of the type described above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R Bellinger whose telephone number is 703-308-6298. The examiner can normally be reached on Mon - Thurs (9:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason R Bellinger
Examiner
Art Unit 3617



jrb



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